

PATENT CLAIMS:

1 – 13 (canceled)

14. (new) A laminated core testing device to test a laminated core in a generator, comprising:

a field winding that lies in parallel with an axis of rotation of the generator and is connected to a device that produces alternating current;

an infrared image detection device that is designed to detect infrared radiation; and

a high-voltage testing device that makes available a frequency that is greater than 50 Hz and a power in single-phase form at an output voltage of at least 400 V that can be regulated.

15. (new) The laminated core testing device as claimed in claim 14, wherein the high-voltage testing device has a controllable frequency converter for the purpose of converting a fundamental frequency into a higher frequency.

16. (new) The laminated core testing device as claimed in claim 14, wherein the high-voltage testing device has an input side which can be connected to a three-phase power supply.

17. (new) The laminated core testing device as claimed in claim 16, wherein the three-phase power supply has a three-phase 400 V AC voltage.

18. (new) The laminated core testing device as claimed in claim 14, wherein the high-voltage testing device makes available the electrical power at a frequency of greater than 400 Hz.

19. (new) The laminated core testing device as claimed in claim 14, wherein the field winding comprises at least two lines.

20. (new) The laminated core testing device as claimed in claim 14, wherein the high-voltage testing device is in the form of a transportable device.

21. (new) A high-voltage testing device, comprising:
a single-phase output signal that can be regulated; and
an output voltage of at least 400 V having an output frequency of more than 50 Hz for a laminated core testing arrangement in a generator.

22. (new) The high-voltage testing device as claimed in claim 21, further comprising a controllable frequency converter for converting a fundamental frequency into a higher frequency.

23. (new) The high-voltage testing device as claimed in claim 21, further comprising an input side that can be connected to a three-phase power supply.

24. (new) The high-voltage testing device as claimed in claim 23, wherein the input side can be connected to a three-phase 400 V AC voltage.

25. (new) The high-voltage testing device as claimed in claim 21, wherein electrical power at a frequency of greater than 400 Hz is made available.

26. (new) A method for testing for faults in a stator of a generator, comprising:
producing alternating current via a high-voltage testing device being connected to a field winding that lies in parallel with an axis of rotation of the generator;
detecting and recording infrared beams in the direction of the axis of rotation using an infrared image detection device,
making available power in a single phase form via a high-voltage testing device at a frequency of greater than 50 Hz at an output voltage of at least 400 V that can be regulated; and
inspecting a detected infrared recording for hot-spots which point towards faults in the generator.